



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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December 3, 2014

Mr. John Winkle
Federal Railroad Administration
1200 New Jersey Avenue, SE
Room W38-311
Washington, D.C. 20590

RE: Federal Draft Environmental Impact Statement for the All Aboard Florida Phase II – Orlando to Miami, Florida Intercity Passenger Rail Project; CEQ No.: 20140280

Dear Mr. Winkle:

The U.S. Environmental Protection Agency (EPA) has reviewed the Federal Draft Environmental Impact Statement and Section 4(f) Evaluation for the All Aboard Florida Phase II – Orlando to Miami, Florida Intercity Passenger Rail Project and is commenting in accordance with Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The proposed project includes adding a second track within 128.5 miles of the existing Florida East Coast Railroad right-of-way between West Palm Beach and Cocoa, Florida. Additionally, the project includes a new 40-mile railroad line parallel to State Road 528 between Cocoa and Orland International Airport and a new vehicle maintenance facility south of the airport. Grade crossings, bridges, and signalization improvements are planned along with adding new communications and train control systems.

Phase I of the proposed passenger rail project was addressed in a 2012 Environmental Assessment (EA) which included rail improvements between West Palm Beach and Miami. A 2013 Finding of No Significant Impact (FONSI) was issued by the Federal Rail Administration (FRA) which included the construction of three (3) new stations, purchasing five (5) train sets, adding a second track along most of the 66.5-mile corridor and adding new roundtrip service between West Palm Beach and Miami. Direct impacts from Phase I are not addressed in this DEIS for Phase II but the cumulative effects of both phases are included in the DEIS. FRA determined that Phase I of the passenger rail project has independent utility.

EPA's has provided detailed review comments in an attachment to this letter (See Attachment A). The DEIS identifies the No Action alternative and three (3) detailed study alternatives (i.e., Alternatives A, C and E).

EPA has identified Alternative A as its environmentally-preferred alternative because of reduced impacts to jurisdictional wetlands and several other resources. EPA has provided a rating of "EC-2", indicating that there are environmental concerns for the overall proposed

project and that additional information (2) is being requested for inclusion in the Final Environmental Impact Statement (FEIS). EPA has identified jurisdictional wetland and stream issues, potential water quality and sole source aquifer issues, and noise and vibration impacts as the primary environmental concerns requiring additional information and analysis. In the attachment, EPA has requested detailed information be included in the FEIS. Jurisdictional wetland and stream compensatory mitigation requirements need to be identified and fully disclosed in the FEIS and further addressed and resolved during the Section 404 permitting process with the EPA.

EPA supports alternative modes of transportation such as high-speed, passenger rail due to the potential environmental air quality benefits as identified in the DEIS from the long-term reductions in emissions from automobiles and other vehicles. EPA requests that continued coordination with local, state and Federal cooperating agencies continue during the preparation of the FEIS as well as ongoing dialogue with affected communities. If you have any questions concerning these comments, please contact Mr. Christopher Militscher of my staff at 404-562-9512 or by e-mail at Militscher.chris@epa.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Heinz J. Mueller", with a long horizontal flourish extending to the right.

Heinz J. Mueller, Chief
NEPA Program Office

w/Attachment A

Attachment A – Detailed Technical Review Comments
Federal Draft Environmental Impact Statement for the All Aboard Florida Phase II – Orlando to
Miami, Florida Intercity Passenger Rail Project; CEQ No.: 20140280

Alternatives Considered

The DEIS provides a generally summary of the alternatives considered for the proposed project in Table S-1. The No Action alternative is also described in this table. Each segment of the project is broken down in this table including the Phase I West Palm Beach to Miami section (WPB-M), and adding a second track along the 128.5 mile corridor between WPM and Cocoa (N-S) section, the construction of a new rail line of approximately 35 miles between Cocoa and Orlando International Airport (MCO) (E-W section), the construction of a new Vehicle Maintenance Facility (VMF) and various station improvements at Miami, West Palm Beach and Fort Lauderdale. For the E-W section, 5 new bridges over water are proposed for all three alternatives examined (Alternatives A, C and E). For the N-S corridor segment, 18 bridges would need to be reconstructed. For the WPB-M section, 7 bridges would require reconstruction. The construction of the new VMF would require the construction of 1 new bridge.

Each of the 3 alternatives would provide 16 roundtrip services (32 trains/day). Ridership is anticipated to be 3.5 million persons in the design year for each alternative. The differences between Alternative A, C and E are primarily in the 17.5-mile section of the E-W corridor. Alternative A would provide 17.5 miles of new rail within the State Road (SR) 528 right-of-way (ROW) owned by the Orlando-Orange County Expressway Authority (OOCEA) and the Florida Department of Transportation (FDOT). Alternative C would provide the 17.5 miles of new rail along the boundary of this ROW and Alternative E would provide the 17.5 miles of new rail 100 feet south of the current ROW.

The proposed project is not anticipated to impact local vehicular traffic along the MCO segment or along the E-W corridor as there are no at-grade road crossings proposed. For the N-S corridor, typical at-grade crossings would be closed an average of 54 times per day (3 times per hour), with closure times ranging from 1.7 minutes for passenger trains to 2.8 minutes for freight trains. The total hourly closure rate at these at-grade crossings would range between 4.2 minutes and 4.5 minutes per hour. This is approximately 2 minutes per hour above the 'No Action' existing conditions.

Air Quality Impacts

The 9 counties within the project study area are designated as being in attainment with the National Ambient Air Quality Standards (NAAQS) for carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particle pollution (PM_{2.5} and PM₁₀). Baseline mobile source emissions for the Phase II area of the project for the year 2008 including Brevard, Indian River, St. Lucie, Martin and Palm Beach Counties are shown in Table 4.2.1-3 of the DEIS. Emission rates in tons per year are provided for carbon monoxide, sulfur dioxide, nitrogen dioxide, PM₁₀ and volatile organic compounds (VOCs) are provided. The DEIS indicates that most of the primary source of these pollutants are from combustion engines from automobiles.

The proposed project is expected to remove approximately 336,000 vehicle trips per year from the regional roadway network in 2016 and 1.2 million vehicles in 2019. The new passenger rail service is also expected to remove ridership from inter-city motorbus services and regional air flights. The FRA and AAF are projecting an overall decrease in criteria pollutants [and mobile source air toxics] as a result of project implementation from the reduction of automobiles and other vehicles from regional roadways. The DEIS provides projected quantified reductions of 1,654 tons of CO, emissions, 192 tons of NO_x emissions, 59 tons of VOC emissions, and 7 tons of PM₁₀ by the Year 2030.

Noise and Vibration Impacts

The proposed project is not expected to create adverse noise conditions for the MCO section. For the E-W corridor, passenger rail operations adjacent to SR 528 would increase future noise levels and potential noise impacts. In the E-W corridor section, the project is anticipated to moderately impact 105 residential receptors and severely impact 5 residential receptors and 1 moderate impact for an institutional receptor. Noise impacts are essentially the same for all three build alternatives. Noise along the E-W corridor is due primarily to the sound created by the passing trains.

Based upon information presented in the DEIS (Tables 5.2.2-9 and 5.2.2-10), no receptors along the N-S Corridor would experience noise levels that exceed impact criteria. However, the proposed project will result in long-term noise adverse impacts to residents and properties along the N-S corridor primarily due to the increased frequency of warning horn use at 'at-grade' crossings. The use of wayside horns is being proposed as a mitigation measure to eliminate severe noise impacts for residential and institutional receptors along the N-S corridor. AAF (All Aboard Florida) has committed to installing stationary wayside horns at each of the 159 grade crossings between Cocoa and West Palm Beach. Noise analysis was based upon the use of the use of wayside horns along N-S corridor. The use of wayside horns are expected to minimize impacted receptors. The DEIS also states that where compliant with safety regulations and FRA guidelines, AAF will work with local communities that would like to create 'quiet zones' as an alternate noise abatement measure to wayside horns. The DEIS states that AAF cannot create a quiet zone and that the public entity must go through the application process with FRA.

Similar to noise impacts, there are no expected vibration impacts for the MCO section. The greatest potential for vibration impacts is along the existing N-S corridor section due to the approximate doubling of vibration events (i.e., passing trains). The N-S corridor is expected to have potential vibration impacts to 3,317 residences, 513 institutions, 3 Television studios, 9 auditoriums and 3 theaters. In the E-W corridor, there are potential vibration impacts to 118 residences and 12 institutional receptors.

The DEIS states that FRA and AAF will potentially minimize vibration impacts by wheel and rail maintenance activities that will help to control unacceptably high vibration levels. Furthermore, the DEIS indicates that vibration levels will be minor in nature and would not exceed the threshold for structural damage to buildings. EPA requests that FRA and AAF

elaborate on proposed maintenance activities that will potentially reduce noise and vibration impacts in the FEIS.

The DEIS identifies that there will also be temporary, short-term vibration [and noise] impacts to nearby receptors during construction, particularly from pile-driving during bridge construction. EPA recommends that FRA guidelines and requirements for noise abatement for severe (and moderate) noise impacts be followed and that noise abatement mitigation measures be implemented. Table 7.2-2 includes installing noise barriers along the E-W corridor where effective in reducing noise impacts near elevated structures and install pole-mounted horns at grade crossings. EPA recommends that these, as well as any other noise mitigation and abatement measures that are feasible and of public importance, be considered and evaluated. EPA acknowledges the commitment to project BMPs and mitigation measures for noise and vibration during the construction phase as well as operational phase. The FRA should consider and identify any other appropriate and cost-effective noise and vibration abatement measures during construction and for passenger train operations in the FEIS. EPA recommends that FRA and AAF consider the use of vegetation and other types of screens or barriers that can potentially minimize noise impacts to receptors.

Water Resources Impacts

On page 5-76 of the DEIS, for Alternative A, the paragraph states that there are 21 new and 10 replacement bridges over waterways. However, Table 5.3.1-1 illustrates 6 new bridges and 25 replacement bridges. This needs to be corrected or clarified by FRA in the FEIS.

The proposed project has the potential to impact surface and groundwater based upon the overall length of the entire project corridor and the number of water crossings (bridges), as well as the project overlapping portions of a Sole Source Aquifer protection zone or zones. Some of the surface water crossings are over Outstanding Florida Waters (OFWs). The project also crosses several well field protection zones or SWAPP (surface water assessment and protection) zones in Brevard, Indian River, St. Lucie, Martin, and Palm Beach Counties, which have well field protection ordinances to protect drinking water supplies from contamination. The DEIS states that AAF will implement BMPs to protect discharge water quality and ensure that freshwater recharge is maintained. Alternative A will 161 acres of pervious vegetated areas to railroad and create 139 acres of new impervious surfaces in the form of buildings, parking lots and roads. The MCO segment and the VMF are also expected to increase impervious surfaces and impact (fill) an existing detention water pond at the airport. A new wet detention pond is proposed to treat stormwater runoff from the VMF. FRA and AAF should ensure that there is no net loss of stormwater treatment and runoff volume in their final design plans for the VMF.

The DEIS indicates that there is little difference between the 3 build alternatives with regard to the impact to surface or groundwater. The DEIS also states that the project would have negligible impacts to surface or groundwater resources. Based upon the size of the project and the potential for surface and groundwater impacts, EPA recommends that the FEIS identify the specific BMPs to be applied to attain appropriate reductions in sediment loads and what additional monitoring will be conducted to achieve pollutant reductions. Mitigation measures related to protection of water quality should be tailored depending on the condition of the

specific water resource as well as the severity of potential impacts. Proper control of storm water runoff during construction will also be critical. Construction activities have the potential to introduce sediments in adjacent water bodies that could exacerbate problems relative to increasing sediment oxygen demand which affects dissolved oxygen levels. Monitoring commitments should be included to ensure that water quality and in-stream habitat are fully protected. Storm water controls should be monitored periodically for the duration of construction and maintained to help ensure successful BMP implementation. To further assist in the long-term reduction of pollutant loadings to surface water resources in the project area, EPA recommends that storm water runoff from the proposed project (rail line and adjacent ROW) be collected and treated before being discharged to surface waters. The FEIS should comprehensively address environmental commitments to protect water resources within the project study area.

The proposed project includes the construction of or repair/replacement of several bridges and crosses several OFWs, as well as Sole Source Aquifer (SSA) protection zones and well head protection zones. The fact that the project involves Sole Source Aquifer zones, consultation with EPA's Sole Source Aquifer coordinator is strongly encouraged. Please refer to the following link which includes a document entitled "Sole Source Aquifer Memorandum of Understanding (MOU) - The United States Environmental Protection Agency, Region 4, The Federal Highway Administration, Florida Division, and The State of Florida, Department of Transportation" (http://www.epa.gov/safewater/sourcewater/pubs/fs_ssamou_fhadotflusepareg4.pdf). While this MOU is with USDOT's FHWA and not specifically FRA, EPA recommends that the FRA and AAF follow the basic provisions of this MOU and address additional coordination efforts in the FEIS.

As stated in the DEIS, a portion of the project lies within the Biscayne Aquifer SSA Streamflow and Recharge Zone area. EPA has designated the Biscayne Aquifer SSA Streamflow and Recharge Zone as a sole source aquifer. EPA defines a sole source aquifer as an underground water source that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water sources that could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. The Sole Source Aquifer Program is authorized by Section 1424(e) of the Safe Drinking Water Act of 1974. Designation of an aquifer as a sole source aquifer provides EPA with the authority to review federal-financially assisted projects planned for the area to determine their potential for contaminating the aquifer.

Table 5.3.3-4 in the DEIS provides a comparison of wetlands acreage impacts for the project alternatives. Of the three build alternatives, Alternative A impacts 128 acres of aquatic resources; 17 acres of surface waters/aquatic habitat and 111 acres of wetlands (70 acres forested and 41 acres non-forested), Alternative C impacts 165 acres of aquatic resources; 7 acres of surface waters/aquatic habitat and 159 acres of wetlands (90 acres forested and 60 acres non-forested) and Alternative E impacts 157 acres of aquatic resources; 6 acres of surface waters/aquatic habitat and 152 acres of wetlands (100 acres forested and 53 acres non-forested). Overall, Alternative A results in the lowest acreage of loss of aquatic resources, including wetlands.

The DEIS included a summary of direct wetland impact acreage but did not include information regarding the estimated UMAM scores for each of the build alternatives. The State of Florida utilizes UMAM to determine the amount of mitigation required to offset wetland and surface water impacts. USACE accepts UMAM as a suitable qualitative wetland assessment methodology. A comparison of the UMAM functional loss for the build alternatives was not included in the DEIS. This information should be included in the FEIS. From a strictly quantitative perspective of impacts to jurisdictional resources, EPA environmentally prefers Alternative A.

Regarding mitigation, the DEIS only includes "Purchase wetland mitigation credits" as a mitigation measure. The DEIS does not contain specific mitigation commitments. The FEIS should include avoidance and minimization measures, as well as specific compensatory mitigation plans for unavoidable impacts to jurisdictional wetlands. The FEIS should present whether the preferred alternative selected is the least environmentally damaging practicable alternative (LEDPA) that satisfies the purpose and need per the Clean Water Act Section 404(b)(1) Guidelines.

Regarding floodplain impacts, Table 5.3.4-1 of the DEIS includes summaries for the 3 build alternatives. Alternative A has the least impact to floodplains at 284.0 acres while Alternative C has 340.5 acres and Alternative E has 339.8 acres. EPA recommends that the FEIS include information regarding floodplains associated with the preferred alternative and what type of additional avoidance or minimization efforts will be needed to meet regulatory floodplain standards. The FEIS should also include appropriate mitigation commitments for unavoidable floodplain impacts.

Other Natural Resources Impacts

Page S-16 and 5-110 of the DEIS states that the USACE is the lead federal agency for Endangered Species Act (ESA) compliance requirements. This information should be clarified in the FEIS to state that the U.S. Fish and Wildlife Service and National Marine Fisheries Service are the lead federal agencies for ESA compliance and that the USACE has agreed as a cooperating agency with FRA to insure that the ESA requirements are being satisfied. The USACE cannot issue the Section 404 permit until the permit applicants (FRA and AAF) satisfy any appropriate ESA requirements. For Essential Fish Habitat (EFH) issues, EPA defers to National Marine Fisheries Service for specific comments and continued consultation. EPA acknowledges the ESA determinations stated on page 5-110 and referenced to Appendix 5.3.6-B.

For any habitat fragmentation issues associated with the E-W corridor segment, EPA defers to the State and Federal wildlife agencies on specific comments. EPA requests that FRA and AAF consider the requirements of E.O. 13112 on Invasive Species and develop and implement appropriate BMPs during construction to minimize the establishment and spread of invasive plant species near new ROW areas. EPA requests that these BMPs be identified in the FEIS as an environmental commitment.

Other Human Resources Impacts

EPA notes from the DEIS that land use will change substantially with the proposed passenger rail project. AAF proposes to purchase privately owned property, as well as lease property, which would result in the conversion of up to approximately 423 acres of land to transportation use. Land use conversions will occur in the E-W corridor only. The DEIS indicates the following: Alt A – 44 acres acquired, 245 leased; Alt C – 44 acres acquired, 374 leased; and Alt E – 44 acres acquired, 374 leased. EPA recommends the minimization of land conversion to the greatest extent practicable and that Alternative A presents the least amount of land conversion.

Navigation impacts associated with major bridge crossings such as St. Lucie River, Loxahatchee River and New River and changes to existing conditions are addressed in pages 5-17 to 5-33 of the DEIS. EPA has general environmental concerns with bridge removal, repairs/modifications, and replacement or reconstruction practices and how these activities may affect water quality, both during and after construction and during operation of the facility. BMPs for stormwater management should be included in final designs for the project and potential impacts to jurisdictional waters should be avoided and minimized to the extent practicable. Regarding transportation and public safety issues associated with these crossings, EPA defers to the U.S. Coast Guard who is also a cooperating agency on this proposed project.

Regarding hazardous materials and solid waste disposal issues, potential impacts are expected to be the same for the three build alternatives. According to the DEIS, the MCO segment has no contaminated sites located within 500 feet of the project. For the E-W corridor segment, there are 16 potentially contaminated sites located within the 500-foot buffer. For the N-S corridor segment a total of 337 potentially contaminated sites were identified within the 200-foot evaluation area along the 128.5 mile corridor. There is a slight potential for soil disturbance resulting from underground utility installations and storm water pond construction. DEIS states that potential contaminated sites lie outside of the planned construction area. Therefore, impacts from the existing contaminated areas are not anticipated by FRA and AAF. Acquisition of property adjacent to the SR 528 ROW may require further assessment regarding contamination on those properties. This portion of the project is anticipated to be completed within the existing FECR Corridor and would result in minimal subsurface disturbance. EPA requests that the existing ROW be further assessed to determine if contamination resulting from many years of freight train usage is present along the existing FECR rail lines. If any subsurface or soil disturbance is expected to occur in areas that are potentially contaminated, these areas should be assessed and remediated, if necessary, according to FDEP and EPA regulations. EPA recommends that the FEIS include information regarding potentially contaminated sites associated with the preferred alternative and what type of additional site assessment and any remediation activities that may be needed.

Under Section 106 of the National Historic Preservation Act (NHPA), there are two eligible historic bridges (Gallie River and St. Sebastian River) that are proposed to be demolished with either of the 3 build alternatives and constitute an 'adverse effect' determination. EPA defers to the State Historic Preservation Office for further consultation.

The DEIS provides an evaluation of Environmental Justice (EJ) effects for low income and minority communities in Section 5.4.2 of the DEIS. The DEIS provides an overall of Executive Order 12898, pertinent demographic information, and a methodology for determining EJ status. FRA and AAF utilized a new or existing rail line 1,000-foot project study area for census tract estimations and a 10% threshold value (Page 5-124). For the MCO segment, no adverse and disproportionate impacts to EJ communities were identified. For the E-W corridor segment, 2 census tracts were identified as meeting the threshold as EJ communities. Based upon the analysis, the DEIS indicates that there would be no disproportionate and adverse impacts to EJ communities. For the N-S corridor segment, there were 29 census tracts meeting the established EJ criteria. According to the analysis, noise and vibration impacts would be possibly adverse but would not be disproportionate to non-qualifying communities. FRA and AAF are proposing noise abatement (e.g., wayside horns) and vibration mitigation measures (e.g., ballast mats beneath rail lines; "frogs" at selected switch locations) to lessen the severity of impacts to all communities along the N-S corridor segment. If any EJ communities that were not captured through this detailed analysis before the FEIS is issued, EPA requests that FRA continue coordination efforts consistent with the intent of E.O. 12898.

Community impacts such as noise and vibration and indirect and cumulative effects from the 3 build alternatives are discussed in the DEIS. Public health and safety and other related issues are also disclosed in Section 5.4.4 of the DEIS. This section includes information concerning at-grade crossings and train operations. EPA requests that FRA and AAF continue to work closely with affected local communities to address issues of concern such as safety, noise and other related environmental concerns. Appropriate documentation on the response/resolution of these issues should be provided in the FEIS and/or ROD, as appropriate.

FRA and AAF have coordinated with the Natural Resources Conversation Service (NRCS) regarding potential prime and unique farmland impacts. The MCO and N-S corridor segments would have no potential impact on prime farmland soils. Page 5-56 of the DEIS indicates that 19.3 acres of prime farmland soils would be impacted by Alternative A and with Alternatives C and E having 'slightly' more than Alternative A. Regarding farmland conversion and any compensation required, EPA defers to NRCS for any requirements and comments.